



WORLD TRADE CENTER

TENANT FIRE SAFETY GUIDE

WORLD TRADE CENTER TENANT FIRE SAFETY GUIDE

This guide provides information for:

- **One World Trade Center**
 - **Two World Trade Center**
 - **Four World Trade Center**
 - **Five World Trade Center**
-

Staff responsible for administering World Trade Center Fire and Life Safety Programs:

Michael Hurley
Fire Director

435-5677

Barbara Ford
Life Safety Coordinator

435-2889

This booklet was prepared by staff from the World Trade Center Fire Prevention and Life Safety Unit. It is a guide to fire safety at the World Trade Center and outlines procedures to be followed for preventing fires and evacuating your office in the event of an emergency.

The information presented in the guide will be covered in greater detail at training sessions and drills designed to give you knowledge of actions that should be taken to safeguard life during a fire emergency at The World Trade Center. There are a number of ways each firm can participate in, and take advantage of, World Trade Center fire safety programs. The World Trade Center Fire Safety Director is available to speak to tenant groups on a variety of fire and life safety issues, conduct training for Fire Safety Teams and provide orientation seminars for new employees. It is strongly recommended that your firm take advantage of the above programs, which can be customized to fit individual needs and scheduling requirements. Please note that this is a service of The World Trade Center and is provided at no cost to you.

Should a fire occur at The World Trade Center, your safety and the safety of your fellow employees will depend upon the orderly evacuation of your office. In order that this may be accomplished, it is essential that you become thoroughly familiar with the information and procedures contained in this guide. Keep it handy and refer to it often as a means of refreshing your memory with regards to this vital fire safety information.

CONTENTS

- Fire Safety Programs
- Fire Emergency Procedures
- Fire Safety Team Duties
- Floor Warden and Deputy Floor Warden Duties
- Fire Drills
- Information for Floor Wardens Preparing for Fire Drills
- Sample Fire Safety Team Organization Chart
- Fire Safety Housekeeping Checklist
- World Trade Center Fire Safety Features
- Exit and Stairway Identification
- Fire Doors
- Portable Fire Extinguisher Information
- Flammable Liquid Storage
- Additional Information

WORLD TRADE CENTER FIRE EMERGENCY PROCEDURES

Any floor of the World Trade Center that becomes involved in a fire emergency must begin evacuation as quickly as possible after an alarm has been transmitted to the World Trade Center Fire Command Station. After the evacuation of the fire floor has begun, the floor directly above the fire floor must also be evacuated.

Evacuation is to be executed under the direction of the appropriate Floor Wardens, Deputy Floor Wardens and Searchers. It is to be accomplished via stairway, or stairways, as far away from the fire as possible, to at least three floors below the fire floor. Elevators are not to be used for the emergency evacuation of occupants from the fire floor.

Occupants are not to return to the fire area until it has been declared safe by the responsible authorities.

Outlined below are the procedures to follow in a fire emergency:

TO REPORT A FIRE

Any person discovering fire or smoke should immediately contact the Port Authority via telephone, by dialing "HELP WTC" (435-7982) or by activating the manual fire alarm "pull station" located near each emergency egress stairway. Also, you should contact your Floor Warden or Deputy Floor Warden. They will make certain that the fire is reported to the Fire Command Station and will begin to organize the occupants of the floor.

To use the manual fire alarm pull station, simply raise the protective guard, grasp the circular handle marked "pull" located in the center of the device and pull towards you (see *exhibit 1*). This device automatically transmits an alarm to the Fire Command Station as well as the New York City Fire Department. To communicate verbally with the Fire Command Station, you must use the Floor Warden Telephone located in the red cabinet built into the corridor wall (see *exhibit 2*). The telephone is primarily for use by Floor Wardens, who have keys to unlock the cabinet, however, the telephone is accessible at all times by breaking the protective glass cover and opening the door to the cabinet. The telephone is used in the same manner as a standard telephone, with the exception that you will be connected directly to the Fire Command Station after approximately 15 seconds (the time necessary to complete the connection).

If it should become necessary to report a fire situation, try to remain calm and report as much factual information as is possible (location of fire, smoke condition, etc.). Depending on the emergency involved, the public address system speakers (located in the ceiling) will be activated, so that the Fire Command Station will be able to

WORLD TRADE CENTER FIRE SAFETY

PURPOSE

1. To recognize the basic causes of fire, and take preventive action to eliminate them.
2. To establish a method of systematic, safe and orderly evacuation of the occupants of any area of the World Trade Center in case of fire or other emergency, to a safe area, in the least possible time.
3. To provide continuing fire safety education for all occupants of the World Trade Center. This includes instruction in the prompt reporting of fire emergencies, response to fire alarms and the immediate initiation of fire safety procedures to safeguard life and contain the fire until the arrival of the Fire Department.

TENANT REQUIREMENTS

The specific regulations established by the New York City Fire Department require, by law, that each tenant at the World Trade Center:

1. Participate in a fire drill at least once every six months.
2. Make available responsible and dependable employees to be designated as a Floor Warden, Deputy Floor Warden(s) and Searcher(s).
3. Post a Fire Safety Team Organization Chart indicating the names of persons designated as Floor Wardens, Deputy Floor Wardens, Searchers and other required positions. The selection of alternates must also be provided. These assignments must be kept up to date, with absences reported by Floor Wardens to the World Trade Center Fire Command Station or Fire Safety Director.
4. For those tenants having private fire protection systems, arrange for the routine maintenance of fire safety systems located within your leasehold. Under your World Trade Center lease agreement, you are reminded to insure that the required semi-annual maintenance is performed by a contractor certified by the New York City Fire Commissioner as defined in rules of the City of New York, Volume Two. Following the inspection/service a current, detailed report outlining the most recent inspection and maintenance must be forwarded to the WTC Fire & Life Safety offices.

RESPONSE

- The New York City Fire Department, the World Trade Center Fire Safety Director, and other Emergency Response Team staff assigned to assist you will be immediately notified of the emergency. These personnel will activate a set of carefully pre-planned procedures designed to initiate fire control & suppression activities and the evacuation of occupants.

EVACUATION PROCEDURES

- During a fire emergency, the Public Address system will be activated on the floors that must be evacuated. The evacuation signal will be transmitted as the initial tenant alert notice. Upon hearing this signal, you should proceed to the corridor areas, where specific instructions will be broadcast over the public address speakers. It is important to note that voice messages can be most clearly heard in the corridors.
- Do not attempt to call an elevator to the floor of the fire, as it will not respond. Stairways are to be used for evacuation. The stairways have been built with fire resistant materials to provide a means of safe evacuation for occupants.
- Proceed to the stairway or stairways indicated over the public address system or by the Floor Warden and Deputy Wardens of your floor. Form a line two abreast and begin your exit. The last one out of office areas should close the door (without locking it). This will help to confine the fire until the arrival of the Fire Department.
- After receiving instructions over the building public address system and from the Floor Warden and/or Deputy Wardens, proceed down the stairs to a "safe area", which is at least three floors below the fire floor.
- Merge alternately when two lines meet at various floor landings to keep all lines moving.
- Keep conversation to a minimum. Do not push or run. Stay in line.
- Traffic on the stairway is permitted in the down direction only unless otherwise instructed by emergency response personnel or other persons in authority.
- If it is necessary to completely remove occupants from the building, this may be done from a "safe area" via elevators staffed by Emergency Response Team personnel.
- For those occupants requiring special assistance to descend stairs, the Floor Warden, at the request of the individual requiring assistance, assigns one or more coworkers as companions. Also, special "evacuation chairs" are strategically located in all buildings for use by emergency responders.

communicate with either the affected floor, any group of floors, or all occupied floors throughout the World Trade Center.

EXHIBIT 1

Graphic Illustration of manual pull station device.

EXHIBIT 2

Graphic Illustration of Floor Warden telephone.

FLOOR WARDEN

General Duties

As part of his/her normal assignment and daily responsibilities, a Floor Warden at the World Trade Center shall:

- Review the floor plan for his/her floor including the location of all exits, fire alarms and fire fighting equipment.
- Make certain that every office on the floor is under the direction of an adequate number of Deputy Floor Wardens and Searchers. The Floor Warden can then formulate an effective evacuation pattern to primary and secondary exits for each section of the floor.
- Make certain that all members of the tenant safety team on his/her floor are aware of individual duties.
- Inspect, on a daily basis, all exit stairway doors to determine that all doors are maintained in the closed position and that no door is obstructed, inoperable or locked. Report any deficiencies to the World Trade Center Fire Command Station or Fire Safety Director.
- Determine if there are any persons requiring special assistance on the floor and advise the Fire Command Station.
- Make certain that equipment is available to assist the team with their duties (Fire Safety Team baseball caps, whistles, flashlights, etc.). The caps are especially important for identifying the Floor Warden and other members of the team during drills or evacuation.
- Make certain that the Fire Safety Team organization chart is up to date and posted in the corridor by the Floor Warden Telephone station.
- Make certain that the floor is adequately staffed by Fire Safety Team personnel at all times. Substitutions should be made when necessary.

Emergency Duties

In the event of a fire emergency, a Floor Warden at the World Trade Center shall:

- Make certain that the fire alarm has been transmitted.
- Proceed to, and remain at, the Floor Warden Telephone station in the corridor. From this position, Floor Wardens will maintain communications with the World Trade Center Fire Command Station, which will coordinate all activities and provide necessary instructions.

- Should the need for a chair evacuation precede the arrival of the emergency responders, the Floor Warden and certain other Fire Safety Team members may be required to perform the evacuation.
- Once evacuation of an area has begun, do not attempt to re-enter the area until it has been declared safe by responsible authorities.
- Evacuees should remain together with the Fire Safety Team and await instructions as to when they may return to their floors.

FIRE SAFETY TEAM

General Duties

- Become familiar with your floor layout, specifically the location of all exit stairs, fire alarms and fire fighting equipment.
- Make sure all exit doors to stairwells are in a closed position and that these doors are not obstructed, inoperable or locked. Report any deficiencies to the Floor Warden.
- Instruct new employees in emergency evacuation procedures.
- Notify the World Trade Center Fire Safety Director if you have any persons requiring special assistance in your premises. Make specific provisions within your office for the evacuation of this person.
- The Floor Wardens will be periodically contacted by the Deputy Fire Safety Director. Updating of the lists of persons needing additional assistance and Fire Team members may be performed during these conversations.

Emergency Duties

During a fire emergency affecting your floor, each Fire Safety Team member shall:

- If you are the one who initially discovers a fire condition, make certain that the alarm has been transmitted to the World Trade Center Fire Command Station via the fire alarm pull station. Pull stations are located by each emergency exit stairway.
- If you are instructed to evacuate, direct all occupants of your office to exit via the fire stairway to at least three floors below the floor involved in the fire. Elevators must *not* be used unless you are specifically directed to do so. Listen to the public address announcements, which will provide information concerning the evacuation and stairway(s) to use.
- When the last person is out of your office, be sure the entrance door is closed and report to the Floor Warden that your office has been completely evacuated.

- Report daily to the Floor Warden any absent members of the Fire Safety Team.

Emergency Duties

In the event of a fire emergency, a Deputy Floor Warden at the World Trade Center shall:

- Make certain that the fire alarm has been transmitted.
- Make certain that the Floor Warden is notified of the fire incident.
- Be prepared to assume the Floor Warden's emergency duties if called upon to do so.
- Supervise the evacuation of assigned areas:
 - Dispatch male and female searchers to carry out their assigned duties.
 - Assemble all occupants and direct their evacuation via appropriate stairway to three or more floors below the fire floor.
 - Close, but do not lock, all doors after occupants have vacated offices.
 - Report the conditions on the floor to the Floor Warden and assist in the performance of his/her duties.

SEARCHERS

Emergency Duties

In the event of a fire emergency, a Searcher at the World Trade Center shall:

- Be available during a fire emergency to alert occupants of his/her employer's immediate office, adjoining spaces, conference rooms, restrooms, etc.
- In areas that cannot be entered, knock on the door to alert the occupants and make the fire emergency known.
- After performing this duty, report to the Floor Warden or Deputy Floor Warden to report the status of the search and await further assignment.

WORLD TRADE CENTER FIRE DRILLS

Specific requirements established by the New York City Fire Department require that each tenant at the World Trade Center participate in a fire drill once every six months.

- Make certain that all Deputy Floor Wardens have been informed of the fire and that all occupants of the floor are notified and proceed immediately to execute the Fire Safety Plan. Insure that an occupant search is made of all offices, conference rooms, restrooms, etc.
- With the assistance of Deputy Wardens, supervise the evacuation of all floor occupants via stairway to a safe area of refuge at least three floors below the fire floor, unless relieved by Port Authority or Fire Department personnel.
- If involved in the evacuation of persons requiring special assistance, insure that they are assisted from the office area to a safe stairwell. Members of the responding Emergency Response Team will evacuate these individuals to three or more floors below the fire floor.
- To insure that all individuals have been evacuated from the floor, the use of an occupant list is suggested. Such a list can be very helpful in coordinating the number of offices evacuated, since each area can be "checked off" as the office or area is vacated.
- Notify the Fire Command Station (via the Floor Warden Telephone) when the occupants of your floor reach the safe refuge floor.

DEPUTY FLOOR WARDEN

General Duties

As part of his/her normal assignment and daily responsibilities, a Deputy Floor Warden at the World Trade Center shall:

- Assume the duties of the Floor Warden when he/she is not available or when requested by the World Trade Center Fire Safety Director.
- Review the floor plan for his/her floor including the location of all exits, fire alarms and fire fighting equipment.
- Inspect, on a daily basis, all exit stairway doors to determine that all doors are maintained in the closed position and that no door is obstructed, inoperable or locked. Report any deficiencies to the Floor Warden.
- Make certain that all members of the Tenant Safety Team under his/her jurisdiction are aware of their duties. This includes arrangements for the evacuation of individuals requiring special assistance.
- Instruct new employees in emergency evacuation procedures.
- Make certain that the Fire Safety Team organization chart is up to date and posted in the corridor by the Floor Warden Telephone station.

been evacuated. There should be at least one person reporting to you from every station assigned within large occupancies. If someone has not returned to you from a particular area, send someone that has already reported to you to verify that all occupants have been alerted. This "reporting system" method is critical to the evacuation of the floor and must be understood by every team member.

- The initial alert used for fire drills and actual fire emergencies will be the evacuation signal broadcast over the public address system. Other than fire drills, this signal is only used for fire emergencies and will mean that a fire emergency exists and evacuation of the floor may be necessary.
- Visit each tenant prior to the drill making sure everyone knows their assignments and noting any changes in your Fire Safety Team organization chart. Give these changes to WTC Fire Safety Staff on the day of the drill.
- Members should report any lack of occupant participation or cooperation to you. Those persons not participating during drills should be kept to an absolute minimum and should be only those necessary for business coverage and security.

The purpose of these periodic Fire Drills is to instruct World Trade Center occupants in systematic, safe and orderly evacuation procedures in case of fire or other emergency in the least amount of time possible, utilizing the nearest, most accessible and safest means of egress.

Drill Notification

Several days prior to a fire drill, the location, date and time of the drill will be transmitted to each tenant and to the individuals on the floor who have been designated as Floor Wardens and Deputy Floor Wardens. It will be their responsibility to inform all tenant employees on their floor of the date and time of the fire drill.

Drill Procedures

- Immediately prior to the start of the drill, the Public Address System will be activated. The sound that will be made by these speakers will be an electronic alert signal, which will be audible throughout each floor. This will be used as the initial tenant-alerting signal on the floors that are participating in the drill.
- Upon hearing this signal, you are to proceed to the corridor areas where specific instructions will be broadcast over the public address speakers located in the corridor ceilings. Conversation should be kept to a minimum so you can clearly hear the instructions. You will also receive instruction from the members of the Fire Safety Team on your floor.
- A "skeleton crew" may remain in the offices to conduct business and for security reasons during the fire drill. Those who remain in the office however, must participate in subsequent drills to become familiar with the emergency procedures, exit stair locations, etc.
- You are encouraged to ask the members of the Fire Safety Team any questions that you may have regarding the instructions on emergency or evacuation procedures.

Information for Floor Wardens Preparing for Fire Drills

- Using the Fire Safety Team organization chart, verify and/or make any necessary changes for team assignments.
- There will be no official pre-drill meetings. This allows the Fire Safety Team members to become experienced in operating independently, as this may be the case during an actual fire emergency. At the conclusion of the drill, all team members will be requested to meet with the Fire Safety Director for a short critique to discuss the effectiveness of the drill. Meet at the Floor Warden Telephone station on the floor announced during the drill.
- Since, on any given day, you will not know which of your team members are available during drills or actual emergencies (i.e. out of the office), every member assigned to search specific areas must report back to you to verify that the floor has

FIRE SAFETY HOUSEKEEPING CHECKLIST

Of the many measures for preventing fires, and for limiting those that do occur, perhaps none is more important than sensible, fire-safe housekeeping. Unsafe conditions such as accumulated trash, cluttered offices and overloaded extension cords should be immediately eliminated.

Your area of responsibility should be reviewed for possible hazards. Unsafe conditions should be corrected without delay.

General Office Areas

- Do not keep papers, files or combustible materials in aisles, under desks, or piled on top of office furniture.
- Use only Underwriters Laboratory approved multiple outlet "strips" with a fuse for office equipment or electrical appliances.
- Electrical appliances such as coffee makers, hot plates, etc. should not be left "plugged in" when not in use and should be unplugged at the end of each day.
- Flammable and combustible liquids such as solvents, inks, toners, etc. must be stored in an Underwriters Laboratory approved safety cabinet. No more than five gallons are permitted at any time.
- The permanent installation of major electrical, electronic or computer equipment must be approved by the Port Authority to insure that they will not overtax available utilities.
- Smoking is not permitted. "No Smoking" signs should be posted.
- Office trash or furniture should never be placed in freight elevator lobbies or public corridors during business hours.
- Sprinkler systems are most effective when the water spray is not obstructed. This is accomplished by not storing materials, supplies, etc. within 18 inches of the sprinkler heads/ceiling.

Telephone and electrical closets must not be used for storage and must be kept locked at all times.

Materials should never be stored in boxes stacked in aisles.

SAMPLE
WORLD TRADE CENTER
FIRE DRILL & EVACUATION ASSIGNMENT
ORGANIZATION CHART

FIRE DIRECTOR:	MICHAEL HURLEY	435-5677
LIFE SAFETY COORDINATOR:	BARBARA FORD	435-2889
OFFICE FAX:		435-5668

FLOOR _____

SUITE

TELEPHONE

FLOOR WARDEN:

ALTERNATE FLOOR WARDEN:

DEPUTY FLOOR WARDENS:

SEARCHERS:

REVISED _____

ALARM TRANSMISSION: Any person discovering fire or smoke should, without delay, either:
1. ACTIVATE BUILDING FIRE ALARM LOCATED NEAR EXIT STAIRWAYS.
2. TELEPHONE "HELP WTC" (435-7982)

emergency generator is routinely operated and maintained to insure its performance. This equipment supplies emergency power for communications, elevators, emergency lighting in corridors & stairwells, and for the fire pumps. Additional emergency power is also available via electrical feeds from the Public Service Electric and Gas Company in New Jersey.

- An automatic elevator recall system is activated by smoke detectors located in the passenger elevator and freight elevator lobbies. This system automatically recalls all elevators serving, or affected by, a fire to the lobby or skylobby where they are then operated manually under the direction of the New York City Fire Department. This "override" system is a life safety feature preventing an elevator from automatically responding to a floor involved in a fire.
- Public address speakers in corridors of tenanted floors enable the Fire Command Station to broadcast instructions to occupants.
- Battery back-up lighting is present in stairwells, elevator lobbies and in all elevator cabs.
- Photoluminescent paint has been applied to the signs, stair treads and handrails of all emergency stairways to enhance visibility in subdued lighting conditions.

Operational Features

- All Fire Safety staff as well as Deputy Fire Safety Directors are certified by the New York City Fire Department.
- Occupant fire drills are scheduled at intervals not less than once every six months.
- The appointed tenant Floor Wardens and Deputy Floor Wardens receive specific instructions to assist them with their responsibilities during drills and emergencies.
- The World Trade Center Emergency Response Team may be activated to assist in various emergencies. They are assisted by Deputy Fire Safety Directors and other auxiliary staff.
- Technical advice on various fire and life safety matters is provided to all tenants prior to occupancy. Port Authority Fire Safety Staff are readily available to tenants at all times to answer questions, provide training and discuss any concerns that may arise.
- Portable radio communications equipment are carried by Emergency Response Personnel. This communications equipment assures that emergency staff are in constant contact with the Fire Command Station.

WORLD TRADE CENTER FIRE SAFETY FEATURES

The following describes some of the fire safety features found within the World Trade Center.

Building Features:

- Fully redundant, state of the art Fire Command Stations are located in the lobby of each building.
- Smoke detection equipment, which automatically transmits an alarm when the presence of smoke is noted. Detectors are present in numerous locations, including passenger elevator lobbies, freight elevator lobbies and in the heating, ventilation and air conditioning systems.
- An emergency Floor Warden Telephone on each floor provides two-way voice communication with the Fire Command Station which, in One and Two World Trade Center, is staffed 24 hours per day, 7 days per week.
- A smoke purge system, built into the ventilation systems, may be activated in the event of fire. It vents smoke and fumes out of tenant areas, while simultaneously injecting fresh air.
- Three separate fire stairs serve each tower. These give occupants three widely separated evacuation alternatives in the event of fire, as well as giving firefighters safe passage upward. Each of these fire stairways has a standpipe outlet and fire hose on each floor, walls of fire-resistant construction, fire doors, emergency lighting with battery back-up and photoluminescent "glow in the dark" paint to enhance visibility in subdued lighting conditions.
- Water for fire suppression is provided by the standpipe systems and various fire pumps in each tower. Additional pumps are located in the subgrade area and several 5,000 and 10,000 gallon tanks of water are strategically positioned within the towers. Two pumps alone can provide sufficient pressure at the 110th floor, however, by interconnections between the two towers, up to five pumps can be made available for firefighting. Additionally, automatic sprinkler systems provide protection throughout office areas, subgrade levels, and in all retail areas.
- Fire extinguishers and fire hoses are installed in stairwells on tenanted floors. In addition, all-purpose firefighting carts are stationed in skylobbies. These carts, which are used primarily by World Trade Center emergency personnel, are equipped with various types of fire extinguishers (water, carbon dioxide and dry chemical). They also carry self-contained breathing apparatus, resuscitators and other emergency equipment.
- Emergency power is provided when needed by six 1,200 kilowatt emergency generators which are available for use in the event of a power failure. Each

ONE WORLD TRADE CENTER

Graphic illustration of typical floor plan showing stairway locations

Stairway A provides egress from the 110th floor down to the Plaza level.

Stairway B provides egress from the 107th floor down to the Concourse and basement levels.

Stairway C provides egress from the 110th floor down to the Plaza level.

At the Plaza level, emergency doors provide access from the building to the outdoor Plaza. In addition, escalators provide access to the Concourse.

During an emergency evacuation, personnel will be assigned to the Plaza and Concourse levels to assist you and help direct you out of the building.

This illustration depicts a typical floor layout. The specific stairway locations on your floor may vary slightly. It is important to familiarize yourself with all stairways and exits on your floor.

EXIT STAIRWAY IDENTIFICATION

To insure prompt evacuation of your office during a fire or other emergency, it is essential that you familiarize yourself with the location of all stairway exits on your floor. The Floor Warden on your floor will assist you with this. The periodic fire drills which will be held on your floor will also familiarize you with the stairway locations.

Each stairway at the World Trade Center is identified by a letter. Stairway identification signs are posted on both the occupancy side and the stairway side of the door. In addition, an illuminated exit sign is installed at the entrance to all stairways.

FOUR WORLD TRADE CENTER

Graphic illustration of typical floor plan showing stairway locations

Stairways A and B provide egress from the 9th floor down to the Concourse.

Stairways C and D provide egress from the 9th floor down to the Plaza level.

Stairway E provides egress from the 9th floor down to the Plaza Level.

During an emergency evacuation, personnel will be assigned to the Plaza and Concourse levels to assist you and direct you out of the building.

This illustration depicts a typical floor layout. The specific stairway locations on your floor may vary slightly. It is important to familiarize yourself with all stairways and exits on your floor.

TWO WORLD TRADE CENTER

Graphic illustration of typical floor plan showing stairway locations

Stairway A provides egress from the 110th floor down to the Plaza.

Stairway B provides egress from the 107th floor down to the Concourse and all basement levels.

Stairway C provides egress from the 110th floor down to the Plaza.

At the Plaza level, emergency doors provide access from the building to the outdoor Plaza. Additionally, escalators provide access to the Concourse.

During an emergency evacuation, personnel will be assigned to the Plaza and Concourse levels to assist you and help direct you out of the building.

This illustration depicts a typical floor layout. The specific stairway locations on your floor may vary slightly. It is important to familiarize yourself with all stairways and exits on your floor.

FIRE DOORS

Doors leading to stairways at The World Trade Center are specially constructed metal fire doors equipped with self-closing devices. Their purpose is to seal off the corridor or stairway, thereby preventing fire and smoke from spreading from one area, or floor, to another.

Properly used, these specially constructed fire doors can confine a fire to a small area and, as a result, protect lives and property. However, fire doors that are wedged, tied or held open so that they cannot close are rendered useless. To protect yourself and your fellow employees, make sure the fire doors on your floor are always kept closed.

If you must evacuate your office during a fire emergency, make sure the last one out closes the office doors without locking them. This will also help to contain the fire until the arrival of the Fire Department and allow the Fire Department quick access without forcible entry.

PORTABLE FIRE EXTINGUISHERS

The purpose of a portable fire extinguisher is to enable an individual to extinguish relatively small or incipient stage fires. Portable extinguishers are not intended to be a substitute for other extinguishing systems - their primary use is a first line defense against limited fires. Therefore fire extinguishers are considered necessary even when a property is equipped with automatic, fixed fire protection systems.

Portable extinguishers are classified according to their intended use, depending on the type of material involved in the fire. All extinguishers display a rating which indicates what classification of fire the particular extinguisher is appropriate for, and is labeled with an identification decal to afford the user the capability of quickly determining the class, or classes, of fire the extinguisher can be used on.

Whether an extinguisher is effective on a fire often depends on the individual using it. One person may be able to extinguish a fire that someone else, using the same equipment, may not. Many extinguishers discharge their entire contents in 15 to 30 seconds, leaving little time for experimentation. Once the extinguisher is at the fire site, it must be used quickly. Although there are simple instructions on every extinguisher, knowing the location and operational procedures beforehand will enable the user to be more effective during the critical early stages of a fire.

The early detection of a fire and signaling of an appropriate alarm are the most significant factors in preventing large losses from occurring. It is essential that proper notification be made immediately and occupants alerted prior to attempting control or suppression through the use of a portable fire extinguisher.

As a general rule, fire fighting should be left to the experts. Before a decision is made to use a portable extinguisher to fight a fire, you must be sure of the following:

- All occupants have been notified of the emergency and are in the process of evacuating

FIVE WORLD TRADE CENTER

Graphic illustration of typical floor plan showing stairway locations

Stairway A and B provide egress from the 9th floor down to the Plaza Level.

Stairway C provides egress from the 8th floor down to the Concourse.

Stairway D provides egress from the 9th floor down to the Concourse.

Stairways E and F provide egress from the 9th floor down to the Plaza Level.

During an emergency evacuation, personnel will be assigned to the Plaza and Concourse levels to assist you and direct you out of the building.

This illustration depicts a typical floor layout. The specific stairway locations on your floor may vary slightly. It is important to familiarize yourself with all stairways and exits on your floor.

remember this procedure is to think of the word "PASS" (see exhibit 5).

1. **P**ull the pin - Holding the extinguisher with the nozzle pointing away from you, release the locking mechanism. In most cases, this means pulling out the pin located below the discharge lever.
2. **A**im low - Standing six to ten feet from the fire, point the extinguisher nozzle at the base of the fire - the lowest point of the fire nearest you.
3. **S**queeze - Squeeze the discharge lever slowly and evenly. This will release the extinguishing agent and expel it through the nozzle.
4. **S**weep from side to side - As the agent is expelled, keep the extinguisher aimed at the base of the fire and sweep the nozzle from side to side. As the fire closest to you goes out, you may carefully move closer and continue the sweeping motion until the fire is extinguished.

Begin fighting the fire from a safe distance. Exposing yourself to extreme heat by positioning yourself too close to the flames is dangerous and may cause the fire to spread due to pressure from the extinguisher.

The above is provided for informational purposes only and is not intended to serve as a complete lesson in the operation and use of portable fire extinguishing equipment.

As previously noted, as a general rule fire fighting should be left to the experts. Occupants should not attempt to use fire extinguishing equipment if by doing so they would delay appropriate notifications to building personnel, delay notifications to occupants on the floor, delay the evacuation process, or place themselves, or others, in danger.

EXHIBIT 3

Fire extinguisher illustrations.

the area.

- Building personnel been notified or the manual fire alarm pull station has been activated.
- The extinguisher is of the proper type and size for the fire and is fully charged.
- The fire is confined to a small area and is not spreading or advancing rapidly.
- Your back is to an unobstructed exit allowing for quick egress.
- The room is not filled with smoke.

Types of Fires

Fires are grouped into four basic categories - A, B, C and D. These classifications describe a fire's fuel (i.e. what is burning) and, when used to rate fire extinguishers, identify what classes of fire the extinguisher can, or cannot, extinguish.

- Class A fires involve ordinary combustibles - wood, paper, trash, cloth, rubber and many plastics.
- Class B fires involve flammable liquids - oils, greases, tars, oil-based paints and lacquers.
- Class C fires involve energized electrical equipment - computers, radios, televisions, appliances, etc.
- Class D fires involve combustible metals - magnesium, sodium, titanium, etc. These fires are generally limited to industrial settings and require specialized extinguishing equipment.

Types of Fire Extinguishers

There are two sets of standard symbols used to label a fire extinguisher for the class, or classes, of fires on which it can be used - a pictorial classification symbol and a letter designation. One or both of these symbol sets will appear on the label of all portable extinguishers (see *exhibit 3*).

If a fire extinguisher has a slash through any of the pictorial symbols, it is identifying that the extinguisher may be dangerous if it is used on that type of fire (see *exhibit 4*).

Extinguisher Operation

There are various types and styles of portable fire extinguishers. Most have common features such as a "pin" to prevent accidental discharge, a lever to activate the extinguisher and release the extinguishing agent and a nozzle, hose or horn.

There are four basic steps for operating a portable fire extinguisher. An easy way to

regularly for leaks and leaking cans must be replaced promptly.

- A flammable liquid storage area must be clearly designated by "Flammable Liquid" and "No Smoking signs".
- Storage of flammable liquids may not be adjacent to exits or in pathways leading to exits.
- An adequate quantity of portable fire extinguishers must be placed in the immediate vicinity of duplicating machines and in storage areas containing flammable liquids.

TO OBTAIN ADDITIONAL INFORMATION

Port Authority Fire and Life Safety Staff are available to answer any questions or discuss any concerns you may have. There are a number of ways each firm can participate in, and take advantage of, World Trade Center fire safety programs. The World Trade Center Fire Director is available to speak to tenant groups on a variety of fire and life safety issues, conduct training for Fire Safety Teams and provide orientation seminars for new employees. It is strongly recommended that your firm take advantage of the above programs, which can be customized to fit individual needs and scheduling requirements.

Anyone interested in participating in these programs, or becoming a Fire Safety Team member, should contact the Port Authority Fire and Life Safety office at 435-5677.

Please note that the above are a service of The World Trade Center and are provided at no cost to you.

To obtain additional information on the material contained in this guide or on any aspect of the World Trade Center Fire and Life Safety Programs, please contact Michael Hurley at 435-5677.

Portable Fire Extinguishers - General Requirements

- One Underwriters Laboratory approved multi-purpose dry chemical extinguisher shall be provided at file, stationery, stock, mail and copy machine rooms. a central location for this extinguisher may be selected to serve more than one room providing the travel distance does not exceed 75 feet. In such event, an additional unit will be needed.
- One extinguisher shall be provided at the entrance door to computer rooms, teletype rooms, communications rooms, etc. Additional units should be provided for larger rooms when the travel distance will exceed 75 feet.
- All extinguishers must be mounted on wall brackets no less than two feet nor more than four and a half feet above the floor.
- All extinguishers must be serviced in accordance with the respective manufacturer's instructions and New York City Fire Codes and must have the service date entered on a tag affixed to the extinguisher.

WORLD TRADE CENTER FIRE EXTINGUISHING EQUIPMENT

Each stairway landing at The World Trade Center is provided with a fire standpipe equipped with 125 feet of 1½ inch fire hose and a hose nozzle.

Pressurized water fire extinguishers are also provided in protective metal cabinets installed at each stairway landing. The door of this cabinet may be opened by breaking the glass panel with the fire hose nozzle mentioned above.

This "first aid" fire extinguishing equipment is intended for the protection of World Trade Center occupants in the event of a fire condition. It can be used to extinguish small fires or to contain a fire until the arrival of the Fire Department. However, World Trade Center occupants should not attempt to use this equipment if by doing so they would expose themselves to personal danger or cause delay in the evacuation of the fire floor.

FLAMMABLE LIQUID STORAGE REQUIREMENTS

Various types of liquids used in normal office operations, such as duplicating machine fluid, acetone, alcohol and cleaning solvents may be flammable or combustible and can present a serious fire hazard if not handled properly.

The New York City Fire Department requires that such materials used at the World Trade Center be strictly controlled as follows:

- The storage of flammable liquids in a tenant area must be limited to five gallons kept in individual one gallon Underwriters Laboratory approved metal safety cans or one quart original plastic containers. In addition, these safety cans or containers must be stored in approved metal safety cabinets. All cans must be inspected

15-P